

In the Abstract

Please amend the Abstract as follows:

--A method and apparatus for reducing logic activity in a microprocessor which examines every instruction before it is executed and determines in advance the minimum appropriate datapath width (in byte or half-word quantities) necessary to accurately execute the operation. Achieving this requires two major enhancements to a traditional microprocessor pipeline. First, extra logic (potentially an extra pipeline stage for determining an operation's effective bit width -the WD width detection logic) is introduced between the Decode and Execution stages. Second, the traditional Execution stage architecture (~~consisting of the~~ including a register file RF and the arithmetic logical unit ALU), instead of being organized as one continuous 32-bit unit, is organized as a collection of multiple slices, where a slice can be of an 8-bit (a byte) or a 16-bit (double byte) granularity. Each slice in this case can operate independently of each other slice, and includes ~~consists of~~ a portion of the register file, functional unit and cache memory. Concatenating a multiple number of these slices together creates a required full width processor.--